



EGUsphere, referee comment RC2
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Review of “Geoscience students' experience of writing academic poetry as an aid to their science education”.

Brigid Christison (Referee)

Referee comment on "GC Insights: Geoscience students' experience of writing academic poetry as an aid to their science education" by Alice Wardle and Sam Illingworth, EGU Sphere, <https://doi.org/10.5194/egusphere-2022-204-RC2>, 2022

This study has the goal of determining the efficacy of poetry-writing as a method of information retention, with a specific focus on using haikus to understand concepts within the geosciences. The authors prompted undergraduate volunteers to create haikus and report their thoughts on both the process and meaning behind them.

They found that the process of creating the haikus was an effective means of learning about geoscience topics, and imply that poetry more broadly could be a tool for better understanding and teaching different scientific subjects. This study would benefit greatly from a larger sample size, as well as a more in-depth quantitative analysis of the general trends that came out of the study. As well, I would like to see a comment on whether or not the haikus produced were accurate or informative. Though the poets themselves might say they understood and were able to capture the importance of the research they were describing, I would like the authors to comment on this themselves. This research is an important step towards recognizing that the barrier between science and art is not as firm as some might think, and that scientists could benefit from using creative thinking to better understand their research.

Firstly, I would like to comment that I have seen and agree with the review left by Stephany Buenrostro Mazon. I would like to thank them for their insightful comments, and I will try not to post too many redundancies.

Abstract

line 10: Specify that this study uses haikus as opposed to poetry in general

lines 12-13: This implies that students benefit the most from **memorising** material, though I would argue that **understanding** or even **being able to explain** material is more valuable. I would think about the results of this study in terms of how the students are able to learn and understand, rather than memorise, since in your introduction you talk about the value of using poetry as a communication tool.

Introduction

You talk about how poetry can be used as a communication tool between disciplines, however this study attempts to gauge the efficacy of poetry **writing** as an education tool. I would include a paragraph discussing how the process of poetry writing can be a way for the poets to better understand the material themselves. The study by Pollack and Korol (2013) supports this argument, as you state that the students in their study were required to demonstrate "contemplation and lateral thinking," however you need to explicitly make the argument that poetry can help **poets** learn better, since that is the goal of your own study.

Talk about **why** the process of writing poetry stimulates learning and communication. Poetry requires creative thinking, and understanding material enough to communicate it in a different type of language. It also involves sitting with material and thinking about it for a long time, something that can also help poets understand content in different ways.

Additionally, there is no comment on why the geosciences specifically were chosen. There is a long history of natural historians, including geoscientists, writing poetry. Contemplation of the natural world, and the concept of deep-time itself, can lead to intense emotional responses not easily explained via scientific language. I would recommend reading the posters presented by myself for PalaeoPoems.com at CSVP 2021 and ConSciCommCan 2020, both of which touch on the history of poetry about palaeontology (a discipline within the geosciences). Both posters can be accessed here: <https://palaeopoems.com/scicomm/>

As well, plenty of literature has been written on the link between natural history and romanticism, including on the topic of geoscience poetry. I understand an in-depth historical analysis is out of the scope of this study, but it would be beneficial to touch on the historical context.

Methods

I fully agree with the comments made by Dr. Mazon. I'll add that another way of getting more participants could be reaching out to geoscience departments, conferences, and social media accounts to ask for their assistance.

Results

Since this is a science journal, you should separate the results and discussion sections (instead of having a single "Results & Discussion" section. The results section should present the results plainly, free from personal interpretation, and the discussion section should interpret and discuss the results in-depth"

I find the structure of the results section a little disorienting. Instead of including comments in-text, I recommend bringing attention to the fact that you provide a link to the , and referring to them as needed. In text, it may be more effective to summarize the sentiments of each comment in-depth.

I'd like to see your findings in graph form, grouping together common sentiments for both Task Process and Task Meaning. This would give us a quantifiable sense of the general sentiments of the participants, such as "frustrating" and "enjoyable," as they relate to the study. Graphs are also a convenient way of presenting trends, for example, I would be interested to see how the answer to question 4 (Have you experience of writing poetry before this exercise?) relates to the responses to questions 1-3.

Discussion

Something important that is missing from this study is a discussion on the poems themselves. Did they accurately represent the science they are trying to discuss? How much information were they able to fit into the haiku format, and what information was lost? Are there parallels between the information presented in each poem, for example, do people avoid longer words or complicated concepts? You mentioned that some of the poets found the format limiting, did this come across when reading the poems? Did students prefer any of the provided text passages over the others? You include a link to the haikus themselves, so when commenting on them be sure to reference them in-text).

Conclusion

Again, I agree with the comments made by Dr. Mazon.

Line 113 – yes, but discuss how these traits (enjoyable, challenging, and valuable) relate to your research goal (determining the efficacy of poetry as a learning tool)